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OUTCOMES AFTER REPEAT PERCUTANEOUS CORONARY INTERVENTION WITH EVEROLIMUS-ELUTING STENT FOR SIROLIMUS-ELUTING STENT RESTENOSIS LESION WITH STENT FRACTURE

Poster Contributions

Hall C

Monday, March 31, 2014, 9:45 a.m.-10:30 p.m.

Session Title: Coronary Intervention - Stents

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Background: Presence of stent fracture (SF) after sirolimus-eluting stent (SES) implantation has reported to be associated with an increased risk of adverse events and those are previously reported. But little is known about the outcomes after re-intervention for SES restenosis lesion with SF.

Method: From April 2007 to August 2011, total 2059 lesions implanted SES during PCI at our hospital. Total 228 lesions, 11.1% had restenosis (defined as %diameter stenosis <50%) in follow-up angiogram until March 2013. Subjects of the study were 49 lesions 42 patients those implanted SES for denovo coronary artery stenosis and in-stent restenosis with SF was documented in follow-up angiogram. SF was defined as complete or partial separation of the stent as assessed by plain fluoroscopy. During the target lesion revascularization procedure, 14 lesions implanted everolimus-eluting stent (EES group), 20 lesions implanted sirolimus- and paclitaxel-eluting stent, stainless steel stent with durable polymer (SS group). And also 15 lesions were dilated with balloon angioplasty alone (POBA group). We compared the outcomes of 3 groups retrospectively.

Result: Baseline characteristics were similar. One-year cumulative incidence of restenosis after repeat intervention those calculated by Kaplan-Meier methods were EES group 22%, SS group 66% and POBA group 76%, respectively. EES group significantly reduced the cumulative incidence of restenosis after repeat intervention (versus SS group; $p=0.0471$ and POBA group; $p=0.0085$).

Conclusion: For reduction in incidence of re-restenosis for the SES restenosis lesion with SF during 1-year after repeat intervention, cobalt chromium EES implantations were superior to stainless steel stent with durable polymer or balloon angioplasty alone.